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# High-level roundtable on "The role of science, technology and innovation in supporting sustainable and resilient societies"

Statement submitted by

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(1) Islamic Dev. Bank.

**1**—intro
We have come here today to talk about Resilience
And how frontier technology can help
I'll start with our perspective on the type of disasters we face..
And introduce Frontier technology examples that can improve our resilience.
These bring alive policy plans
and provide a compass for the road ahead,
highlighting its craters ..As a result life-saving action is taken earlier.
And boosting the frontier technology by leveraging the STI ecosystem is what we want….
Im currently working with IsDB as senior STI advisor to HE to make this happen

**2-**Our starting point is looking at the type of disasters we face..
**First Human disaster**
These stem from conflicts, and fragility, which have become more widespread.
For example approximately one third of IsDB member countries are in fragile situations.

**3-Second natural disasters**
These explosive events are becoming frequent in recent years, affecting our lives and our eco-system.
We simply don't want

tsunamis, earthquakes, nuclear accidents, flood, fires and super-bug/ epidemic outbreaks.
For obvious reasons!

**4-Third climate disasters**
And with global temperature rising beyond any known period in human history···
This phenomenon has severe consequences
So we badly need better predictive tools,
to act well beforehand.

**5-** In response, at IsDB, we have already set up a resilience and Climate Change unit to coordinate and implement climate-related initiatives
And we are mainstreaming climate change..
supporting a low-carbon development or green economy.
Targeting sustainable systems that are adaptive to changing climatic conditions.
Making them robust and resilient

IsDB is also dealing with "fragility" disaster in three ways:
**6-**Relief assistance, support for education and health services,
and training in member and non-member countries.,
and relief assistance operations
**7**-Finances for development projects, emergency response, recovery, and capacity-building) and addressing financial vulnerabilities.

**8-**& Strengthening regional and international cooperation to preserve lives and livelihoods.
..On the path to succeed with the 2030 global development agenda.

**9**—For policies to work even better, opportunities for better predictions exist
Through knowledge
Through avoidance
Through strength
Through research
Lets start by strengthening infrastructure···
Concentrating on excellent predictions···.and prevention.. as the most economical
Path to lower risk!

**10**- That's why we are conducting a policy heavy study with UNESCO
Called GOSPIN
To start strengthening and crosscut STI infrastructure within the whole institution
**11**-Also producing an excellent framework of the power of STI for our MCs prediction and preventative action.

As we are here today to integrate frontier technologies, My favourite ones
That cross cut, and help side step disaster scenarios include the following;
**12-First "space technology"**

Our ability to operate outside the earth is leading to big advantages
One is called satellite geodesy
All the micro movements of the surface of planet earth are (can be) tracked..
Trends in human developments, vegetation, the green canopy of agriculture and food and tectonic plates can be seen with details are increasing each year, revealing powerful trends
We see how mountains move,
How the earth breathes
And what we are doing to it!

**13-second community Artificial Intelligence,**
working at floor level in our lives
mobile camera data collecting pattern···
Seeing, and knowing
The eternal watchman tireless and unyielding,
Spotting changes
tracking rainforests, crime hot spots and
urban deviations
Seeing human trends and
tracking the progression of construction projects

**14-finally the "Second Genome" (Biotechnology)**
It's recently been understood that virtually all diseases are being influenced by this!
We now realise human cells live alongside bacterial cells
Mixed populations of bacteria, many of them unknown

Work for health, or disease.
This has 100 times MORE genetic material, than human cells!
So we will be thinking about disease differently
And therefore how we treat and protect the human race
For example, antibiotics may be doing us damage..
For future resilience, altering treating the microbiome, could be a healthcare revolution.

Thus for resilience, our strategy is to support STI and the ecosystem to fuel our frontier technology.

**15**-To encourage this path we established STI department at IsDB to encourage high impact investment.
Creating a business environment for private capital, and building institutional capacity, where it can grow and develop.
IsDBs thrust is summarised by two initiatives, Engage and Transform.
**16**-"Engage": a pioneering online digital platform designed to connect investors and inventors in the world's developing communities with market opportunities and funding.
These help businesses and innovators to harness the potential of STI to drive economic growth.
**17**-Transform this is a $500 million fund to ensure ~~members~~ SMEs and start-ups have access to financing for innovation (angel fund, VC fund, fund of the fund···.)

**18**-Here IsDB will provide seed money for innovators, start-ups and SMEs for development solutions.
The Fund will also
support partnerships between entrepreneurs and researchers to
address development challenges in line with the SDGs.

**19**
Standing back we believe partnerships are key to resilience, frontier technology and STI.
Thus our core policy is to strengthen the ecosystem strengthening partnerships among donors
dealing with the multifaceted resilience challenges facing the world
For example the "Partnerships Development Complex" has been created to revitalise global partnership.
This will leverage our
regional/global footprint,
to mobilize the resources and
technical expertise needed for resilience.

**20**-
So as a foundation to tackling disasters I definitely recommend including space, community artificial intelligence and the second genome. Then together with a nurturing ecosystem
we can create truly Innovative policy planning tools for building humanities protection

Thank you